

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

Reserve
A304
R313

~~AD-33~~ Bookplate
(1-63)

NATIONAL

A
G
R
I
C
U
L
T
U
R
A
L



LIBRARY

A304

58677

R313

Reserve

3
Essential Steps
in
Cotton Textile Processing

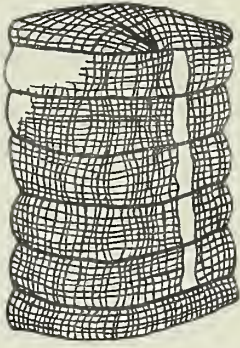


Library
Southern Utilization Research and Development Division
Agricultural Research Service
U. S. Department of Agriculture
P. O. Box 19687
New Orleans 19, Louisiana

2 U.S. Agricultural Research Service. +2a
U. S. DEPARTMENT OF AGRICULTURE

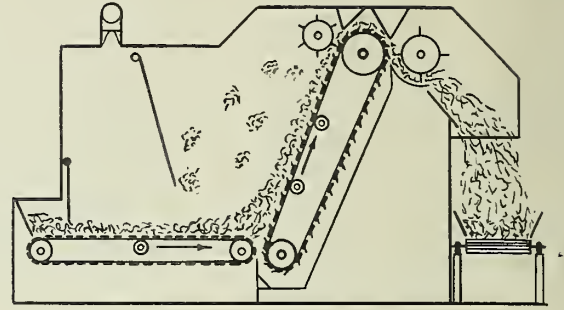
2a
SOUTHERN UTILIZATION RESEARCH AND DEVELOPMENT DIVISION, //
1100 Robert E. Lee Blvd.
New Orleans 19, Louisiana

1. BALE



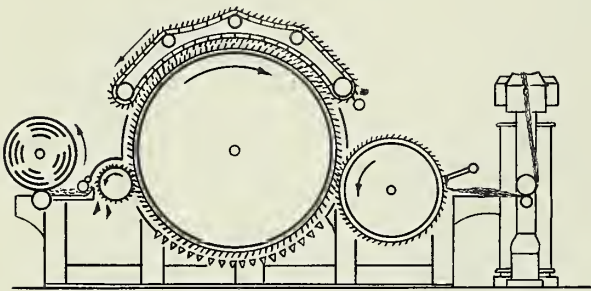
Lint cotton is baled at the cotton gin where the seeds are removed. The average bale used by textile mills weighs 500 pounds.

2. BLENDING



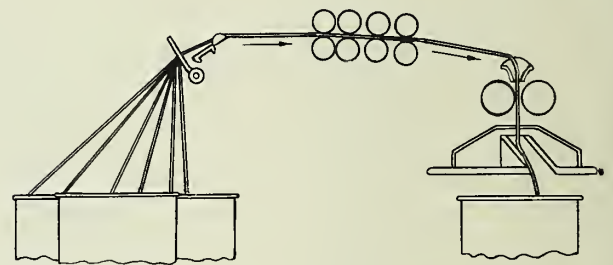
Lint cottons taken from a number of bales are fluffed and blended together prior to processing to give better product uniformity.

5. CARDING



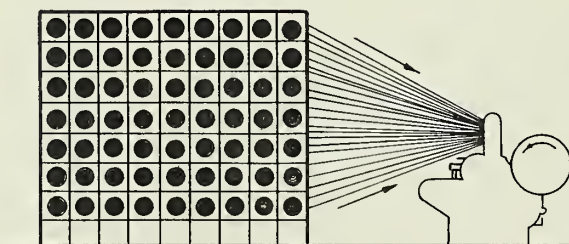
The card converts the lap into a thin, mist-like sheet which is formed into a strand or loose rope of fibers called a sliver.

6. DRAWING



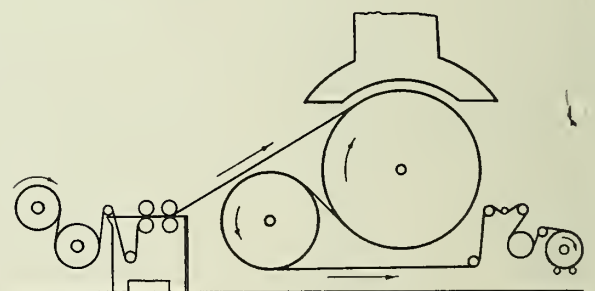
Several slivers are brought together and drawn out to form a single sliver with straightened fibers and improved uniformity.

9. WARPING



Thousands of yarns are parallel wound on a giant spool called a warper beam. Warp yarns run the length of the woven fabric.

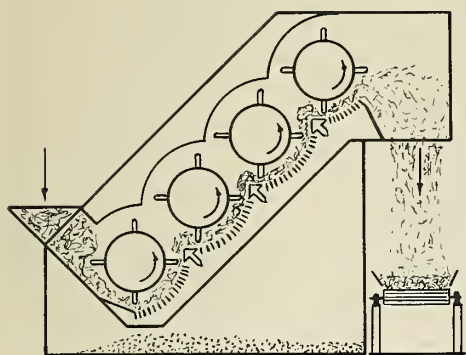
10. SLASHING



In the slasher, warp yarns are coated with starch to give temporary added strength and abrasion resistance needed in weaving.

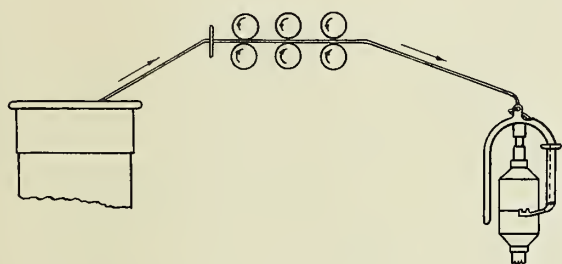
3. CLEANING

58677



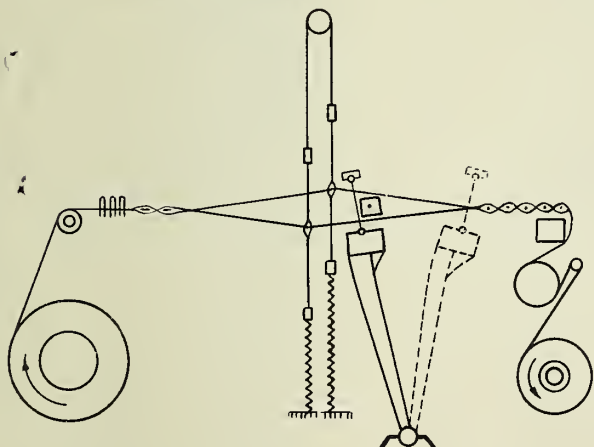
Lint cotton must be cleaned of trash—bits of leaf, twig, and seed—that would lower processing efficiency and fabric quality.

7. ROVING



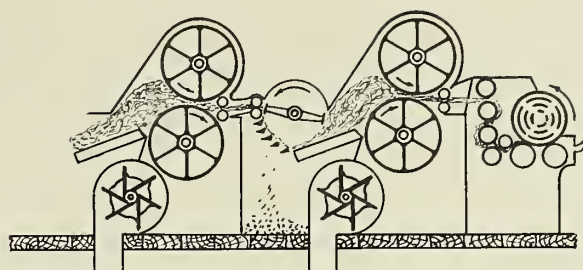
The sliver is further drafted into a smaller strand of fibers, called roving, and wound on a bobbin for spinning.

11. WEAVING



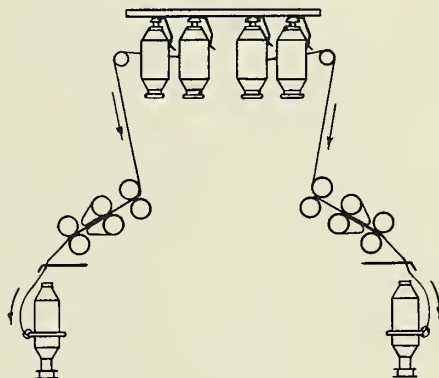
Weaving is the process of forming a fabric on a loom which interlaces the warp yarns with filling or cross yarns.

4. PICKING



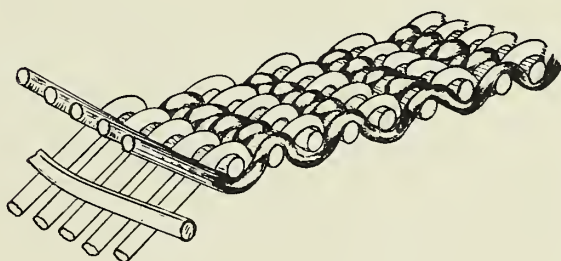
Cleaning is continued in the picker and here the cotton is formed into a continuous sheet known as the picker lap.

8. SPINNING



The spinning machine drafts the roving into a tiny strand of fibers and then twists the strand into a yarn for weaving.

12. FABRIC



The drawing shows how yarns are interlaced to form a plain fabric such as broadcloth, printcloth, or sheeting.



Growth Through Agricultural Progress

U. S. DEPT. OF AGRICULTURE
NATIONAL AGRICULTURAL LIBRARY
DEC 2 - 1963
C & R-PREP.

